# NEW ANIMAL SHELTER 225 MAPLE AVENUE MONTVILLE, CT 06353

S/P+A PROJECT #22.130

DATE: November 27, 2023

The following changes to the Drawings and Project Specifications shall become a part of the Drawings and Project Specifications; superseding previously issued Drawings and Project Specifications to the extent modified by Addendum #1.

# **General Information:**

- The pre-bid sign-in sheet is attached for reference. (1)
- The deadline for RFIs is Tuesday, November 28, 2023, 10:00am.
- See attached RFI log. (2)
- As indicated in the Invitation to Bid, RFIs should be sent to Barbara Griffin, Director of Finance. Her email address is <a href="mailto:bgriffin@montville-ct.org">bgriffin@montville-ct.org</a>.

# **New Specifications:**

• SECTION 329300, PLANTS has been added and is attached as part of this addendum. (8)

# **Changes to the Specifications:**

- COVER, Volume 1 & 2, revise Zip Code "06791" to read "06353".
- TABLE OF CONTENTS:
  - o Project Title, revise Zip Code "06791" to read "06353".
  - Division 32 Exterior Improvements, Section 329300, Pages, revise "6" to read "8".
- BID FORM, Project, revise Zip Code "06791" to read "06353".
- DRAWING LIST, Project Title, revise Zip Code "06791" to read "06353".
- SECTION 084113, ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS:
  - o Page 6:
    - Article 2.3.A.3., revise "Front" to read "Center".
    - Articles 2.3.B. and .C., delete in their entirety.
  - Page 7, Article 2.4.A.1., revise "1-3/4-inch" to read "21/4-inch".
- SECTION 131850, ANIMAL SHELTER AND KENNELL EQUIPMENT, Page 1, Part 2, Article 0.1.A, add "Model BG 1631, without sill".

# **Changes to the Drawings:**

- The following CIVIL drawings have been deleted in their entirety. New drawings have been added and are attached as part of this addendum\*:
  - o C100 SITE PLAN
  - C200 EXISTING CONDITIONS & DEMOLITION PLAN
  - C300 GRADING, EROSION CONTROL & UTILITY PLAN
  - C400 DETAILS
- The following ARCHITECTURAL drawings have been deleted in their entirety. New drawings have been added and are attached as part of this addendum\*:
  - A110 FLOOR PLANS
  - A600 WINDOW ELEVATIONS & DETAILS
  - o A900 PARTITION TYPES, DOOR SCHEDULE & DETAILS
- The following ELECTRICAL drawings have been deleted in their entirety. New drawings have been added and are attached as part of this addendum\*:
  - o E500 ELECTRICAL SCHEDULES
  - E600 ELECTRICAL RISER DIAGRAM
- DRAWING E500, ELECTRICAL SCHEDULES, Lighting Fixture Schedule, Manufacturer/Model Number:
  - Designations 'X' and 'X1', revise 'AC' to read 'E'.
  - Designation 'X2', revise 'A' to read 'E'.

# The bid date remains unchanged by this addendum.

The addendum consists of thirteen (13) pages of  $8\frac{1}{2}$ " x 11" text and nine (9) 30" x 42" drawings\*. End of Addendum #1

11/9/2023 MONTVILLE ANIMAL SHELTER PRE-BID MEETING. G. Donovan Associates Jeff Erfe estimating@gdonovan.com 627 Rt 32 N. Franklin CT 26254 860-642-0700 Rob Croston ESC Controls r. croston Desc Could 18 Jeasen CT, West Hort ford, CT. (860) 471-1941 Brian Piolinet DIEIF Services graip bpiolineko dersuccion MIKE KIRDZIK MUNGER LONSFAGION 203-996-8774 MKIRDZIKE MUDGER GOSTRUGION, WM NOSAL BUILDERS, INC. ROEL LEGASPI 203-919-242 ESTIMATING ENDSALBUILDERS. COM Driando Annovii + Son, Allison Annovii, ALLISON Com Jonell Webster Diversity Construction Group & Estimating Doiversity Cg 203 303 1317 LEON KATEBI BRO Builders L-KATEBIODA/builders (860) 706-p359



Project: New Animal Shelter - Montville State Project/Bid #: S/P+A Project #: 22.130 RFI Deadline: 11/28/23, 10a Bids Due: 12/05/23, 10a

RFI#	QUESTION	DATE RECEIVED	RESPONSE	ADDENDUM # ISSUED
001	Regarding "Montville Animal Shelter" project, could you confirm that the scale of 1":1000' on the cover sheets is correct? It shows that Site Area are around 3,500SF. On C-300, I see a site with almost 150,000 SF area and a rectangle building with almost 3,500SF area. Please clarify.	11/02/23		
002	Would you kindly advise if this project requires DAS Pre- Qualification?	11/17/23		
003	What is the starting date for the project?	11/21/23		
004	Please clarify the extend of survey you are requiring. Do you want a survey of the entire 11-acre Town owned parcel or just the building area?	11/21/23	No survey is required.	1
005	Do you want final as built survey a. of just the foundation? b. project area only? c. property improvement of 11-acre parcel?	11/21/23	a. Yes. b. Yes. c. No.	1
006	Is testing agency costs by the owner? If not provide a list of special inpsections to be carried by the general contractor.	11/21/23		
007	Can the job super be in charge of the quality control or should we have a separate quality control person full time on site?	11/21/23		
008	Can we use the owner's toilets in existing building or carry separage temporary toilets?	11/21/23		
009	Are we to carry field computer, printer and internet and phone service in trailer for the owner/Architect?	11/21/23		
010	Are we to carry a project sign? If so, please provide size and	11/21/23		
	list of names to be included.  Are we to carry pest control? If so, please provide exact			
011	specification.  Please provide limits of temporary fence for the project.	11/21/23		
012	You have a spec section 329300 Plants but nothing has been	11/21/23	Refer to Addendum #1.	1
014	provided.  Please provide specifications and details for 24 LF of timber	11/21/23		1
014	guardrail shown on drawing C100.  Please provide Kawneer model numbers for the basis-of-	11/21/23	Refer to Addendum #1 for revised drawings.	'
015	design storefront and entrance doors as several products meet the specifications.	11/21/23	Storefront: Trifab 451UT Framing System Doors: 500T Insulpour Thermal Entrances	1
016	Specification section 084113-2.3-A-3 calls for the glazing plane to be front, while drawings A600 depicts center plane. Which is correct?	11/21/23	Center plane is correct.	1
017	Glass type GL-13, listed in specification 088000-2.14-H, is indicated as tinted but a tint color is not provided. Referencing specification section 088000-2.2-B & 088000-2.2-C, the tint color is listed as "selected by Architect and Owner from manufacturer's full range". As different tints and tin types have varying price points, can a more specific range be provided for balanced pricing?	11/21/23	Gray and bronze tint ranges.	1
018	Glass type GL-13, listed in specification 088000-2.14-H, is indicated to receive a low-e coating on the #3 surface, but no product is listed. Please provide desired products.  The door schedule on drawing A900 indicates door 100 to be	11/21/23		
019	The door schedule on drawing A900 indicates door 100 to be an aluminum door with a type B frame. Type B frame indicates a 6" frame header which is not offered. Our option would be to stack 2" mullions to achieve the 6" height, but there will be seams visible. Pleae confirm the stacking is acceptable. If not, please provide alternate direction/detail.	11/21/23	Door 100 frame to be Type C.	1
020	Please confirm the opening opposite door 100, in Vestibule 100, is to be type SF15. There are several questions reguarding the round opening marked SF3.  a. As drawn, we cannot utilize the system drawn as there are issues both with the bending, and the configuration to be able to glaze it. An alternate product that can be bent and configured for glazing would be Kawneer's Encore system. This product can be found at Https://www.kawneer.us/products/storefront-framing/encore-framing-system/. Please confirm if this is acceptable to utilize at this location. If not, please provide direction.  b. The details indicate a subsill around the entirety of the opening. This would not be possible as this application would not shed water like a typical storefront system. We recommend a framing only install with full perimeter sealant and a wet sealed glazing system to ensure no water infiltration. Please confirm this is acceptable.  c. The perimeter flashing indicated cannot be bent by our vendors to the radius without damaging the metal. We have not found a suitable substitute for this. Please provide	11/21/23	Both windows in Vestibule 100 are SF1. a. The Encore framing system is acceptable. b. This would be acceptable. c. Refer to Addendum #1 for drawing revisions.	1



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RFI#	QUESTION	DATE RECEIVED	RESPONSE	ADDENDUM # ISSUED
021	Retractable Stairs: a. Do you want a lock for the door panel? b. Do you want 2-hour fire rated door panel with lock?	11/21/23	a. No lock. b. No rating is required.	1

### SECTION 329300 - PLANTS

# PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. The work shall include, but not be limited to, the following:
  - 1. New trees, plants, and ground cover including trees and shrubs.
  - 2. Mulch and fertilizer.
  - Maintenance.

#### 1.2 **RELATED SECTIONS**

Section 329115 - Soil Preparation: Preparation of subsoil and placement of topsoil in preparation for the work of this Section.

#### 1.3 REFERENCES

- A. ANSI Z60.1 - Nursery Stock.
- В. "American Standards for Nursery Stock", latest edition.

#### 1.4 **DEFINITIONS**

- A. Weeds: Includes Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Silverlace, and Crab Grass, Japanese Knotweed.
- Plants: Living trees, plants, and ground cover specified in this Section. B.

#### 1.5 OPERATION AND MAINTENANCE DATA

- A. Submit instructions for continuing Owner maintenance under provisions of Division
- Include cutting and trimming methods; types, application frequency, and 1.

recommended coverage of fertilizer.

#### 1.6 **QUALITY ASSURANCE**

- Supply plants in compliance with "Standardized Plant Names: as adapted by the edition of the American Joint Committee of Horticultural Nomenclature. Provide latest true to botanical name and legibly tagged. stock
- В. Comply with sizing and grading standards of the latest edition of "American Standards for Nursery Stock."
- C. All plants to be grown in nurseries with climatic conditions similar to the locality of the project.
- D. Stock furnished shall be at least the minimum size indicated. Larger stock is

acceptable, at no additional cost, providing that the larger plants will not be cut back to the size indicated.

E. Plants may be inspected and approved at the place of growth for compliance with specification requirements for quality, size, and variety. Such approval shall not impair the right of inspection and rejection upon delivery at the site or during the progress of the work.

# 1.7 QUALIFICATIONS

- A. Nursery: Company specializing in growing and cultivating the plants with three years documented experience.
- B. Installer: Company specializing in installing and planting the plants with three years documented experience approved by nursery.

## 1.8 REGULATORY REQUIREMENTS

A. Comply with regulatory requirements for fertilizer and herbicide composition.

# 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site under provisions of Division 1. Cover plants transported in open vehicles to prevent windburn.
- B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.
- C. Protect plants until planted.
- D. Deliver plant life materials immediately prior to placement. Keep plants moist.

# 1.10 ENVIRONMENTAL REQUIREMENTS

- A. Do not install plant life when ambient temperatures may drop below 35 degrees F or above 80 degrees F.
- B. Do not install plants when wind velocity exceeds 30 MPH.

# 1.11 SEQUENCING AND SCHEDULING

A. Coordinate work under provisions of Division 1. Notify Landscape Architect at least seven (7) working days prior to installation of plant material.

# 1.12 WARRANTY

- A. Provide a warranty on work of this Section for a minimum of one year including one continuous growing season.
  - B. Warranty: Include coverage of plants from death or unhealthy conditions. Replace dead, unvigorous, or unhealthy plants.
- C. Replacements: Plants of same size and species as specified, planted in the next growing season, with a new warranty commencing on date of replacement.

### 1.13 MAINTENANCE SERVICE

- A. Maintenance Services: Performed by installer.
- B. Maintain plant life immediately after placement until plants are well established and exhibit a vigorous growing condition. Continue maintenance until termination of warranty period.
- C. Maintenance to include:
  - 1. Cultivation and weeding plant beds and tree pits.
  - 2. Application of herbicides for weed control in accordance with manufacturer's instructions. Remedy damage resulting from use of herbicides.
  - 3. Application of pesticides in accordance with manufacturer's instructions. Remedy damage from use of pesticides.
  - 4. Irrigating sufficient to saturate root system.
  - 5. Trimming and pruning, including removal of clippings and dead or broken branches, and treatment of pruned areas or other wounds.
  - Disease control.
  - 7. Maintaining wrapping, guys, turnbuckles, and stakes. Adjust turnbuckles to keep guy wires tight. Repair or replace accessories when required.

# PART 2 - PRODUCTS

# 2.1 TREES, PLANTS, AND GROUND COVER

- A. Plants: Provide plant typical of their species or variety; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sun scale, injuries, and frost cracks, abrasions of the bark, plant diseases, voids and open spaces. Plants held in storage will be rejected if they show signs of growth during storage.
  - 1. Dig balled and burlapped plants with firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Cracked or mushroomed balls are not acceptable.
  - 2. Container-grown stock: Grown in a container for sufficient length of time for the system to have developed to hold its soil together, firm and whole.
    - a. No plants shall be loose in the container. b. Container stock shall not be pot bound.
    - 3. Provide tree species that mature at heights over 25'-0" with a single main trunk. Trees

that have the main trunk forming a "Y" shape are not acceptable.

- 4. Plants planted in a row shall be matched in form.
- 5. Plants larger than those specified in the plant list may be used when acceptable to the

Owner.

- a. If the use of larger plants is acceptable, increase the spread of roots or root ball in proportion to the size of the plant.
- 6. The height of the trees, measured from the crown of the roots to the top of the top branch, shall not e less than the minimum, size designated in the plant list.

- 7. No pruning wounds shall be present with a diameter of more than one inch and such wounds must show vigorous bark on all edges.
- 8. Evergreen trees shall be branched to the ground.
- 9. Shrubs shall meet the requirements for spread and height indicated in the plant list. a. The measurements for height shall be taken from the ground level to the average height of the top of the plant and not the longest branch.
- b. Single stemmed or thin plants will not be accepted.
- c. Side branches shall be generous, well-twigged, and the plant as a whole well-bushed to the ground.
- d. Plants shall be in moist, vigorous condition, free from dead wood, bruises, or other root or branch injuries.

### 2.3 SOIL MATERIALS

- A. Topsoil for Planting Pits and Beds: Fertile, friable, natural topsoil of loamy character, without a mixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sand, stone, plants, roots, sticks and other foreign material, with an acidity range between 6.0 and 6.5.
  - 1. Identify source location of topsoil proposed for use on the project.
  - Provide topsoil free of substances harmful to the plants which will be grown in the soil.

# 2.4 SOIL AMENDMENT MATERIALS

- A. Fertilizer: Commercial type containing 12% nitrogen, 13% phosphoric acid, and 12% potash by weight. One-quarter of nitrogen in the form of nitrates, one-quarter in the form of ammonia salt, and one-half in the form of organic nitrogen.
- B. Peat Moss: Shredded, loose, sphagnum moss; free of lumps, roots, inorganic material or acidic materials; weed and seed free, granulated raw peat or baled peat, containing more than 9% mineral on a dry basis.
- C. Bone Meal: Commercial grade, minimum of 3 percent nitrogen and 20 percent phosphorous.
- D. Lime: Ground limestone, dolomite type, minimum 95 percent carbonates.
- E. Water: Clean, fresh and free of substances or matter which could inhibit vigorous growth of plants.
- F. 'M Roots' or approved substitute.

## 2.5 MULCH MATERIALS

A. Mulching Material: Shredded bark type, approved by the Landscape Architect.

# 2.6 ACCESSORIES

A. Wrapping Materials: Standard waterproof tree wrapping paper; Krinkle Kraft or equal.

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Verify that prepared subsoil is ready to receive work.
- B. Beginning to installation means acceptance of existing conditions.

# 3.2 PREPARATION OF SUBSOIL

- A. Prepare subsoil to eliminate uneven areas. Maintain profiles and contours.

  Make changes in grade gradual. Blend slopes into level areas. Remove foreign materials, weeds, and undesirable plants and their roots. Remove contaminated subsoil.
- B. Scarify subsoil to a depth of 3 inches where plants are to be placed. Repeat cultivation in areas where equipment used for hauling and spreading topsoil has compacted
- subsoil. C. Dig pits and beds 6 inches larger than plant root system.

### 3.3 PREPARATION

- A. Time of planting:
  - 1. Evergreen material: Plant evergreen materials between August 15 and September 30 or March 1 to May30. If project requirements require planting at other times, plants shall be sprayed with anti-desiccant prior to planting operations.
  - 2. Deciduous material: Plant deciduous material in a dormant condition. If deciduous trees are planted in leaf, they shall be sprayed with an anti-desiccant prior to planting.
- B. Planting shall be performed only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.
- C. Locate plants as indicated or as approved in the field after staking by the Contractor. If obstructions are encountered discontinue operations until alternate plant locations are chosen by the Landscape Architect.
- D. Excavate circular plant pit with vertical sides, except for plants specifically indicated to be planted in beds. Provide shrub pits at least twelve (12) inches greater than the diameter of the root system and 24" greater for trees. Depth of pit shall accommodate the

root system. Scarify the bottom of the pit to a depth of four (4) inches. Remove excavated materials from the site.

- E. Provide pre-mixed planting mixture for use around the balls and roots of the plants consisting of six parts planting topsoil, one part peat moss and one part dehydrated cow manure. Add 1/2 pound plant fertilizer for each cubic yard of mixture.
- F. Provide pre-mixed ground cover bed planting mixture consisting of three parts planting topsoil to one part peat moss and 1/2 pound of fertilizer per cubic yard. Provide beds a minimum of eight inches deep.

# 3.4 INSTALLATION

- A. Set plant material in the planting pit to proper grade and alignment. Set plant upright, plumb, and faced to give the best appearance or relationship to each other or adjacent structure. Set plant material two (2) to three (3) inches above the finish grade. No filling will be permitted around the trunks or stems. Backfill the pit with planting mixture. Do not use frozen or muddy mixtures for backfill.
- B. After balled and burlapped plants are set, muddle planting soil mixture around base of balls and fill all voids.
  - 1. Remove all burlap, ropes and wires from the tops of balls.
  - 2. Remove completely all non bio-degradable materials.
- C. Space ground cover plants in accordance with indicated dimensions. Adjust planting as necessary to evenly fill planting bed with indicated quantity of plants. Plant to within twelve (12) inches of trunks of trees and shrubs with the planting bed, and to with six (6) inches of the edge of the bed.

# 3.5 MULCHING

A. Mulch trees and shrub planting pits and shrub beds with required mulching material three (3) inches deep immediately after planting. Thoroughly water mulched areas. After watering, rake mulch to provide a uniform finished surface.

# 3.07 WRAPPING, GUYING, AND STAKING

- A. Inspect trees for injury to trunks, evidence of insect infestation, and improper pruning before planting.
- B. Wrap trunks of all trees spirally from bottom to top with specified tree wrap and secure in place.
  - 1. Overlap 1/2" the width of the tree wrap strip and cover the trunk from the ground to the height of the second branch.
  - 2. Secure tree wrap in place with twine wound spirally downward in opposite direction, tied around the tree in at least three (3) places in addition to the top and bottom.
- C. Remove all wrapping at the end of the one (1) year warranty period and before final acceptance.

# 3.8 FIELD QUALITY CONTROL

- A. Field inspection will be performed under provisions of Section 01400.
- B. Plants will be rejected when ball of earth surrounding roots has been disturbed or damaged prior to or during planting.

# 3.9 PRUNING

- A. Prune branches of deciduous stock, after planting, to remove or cut back broken, damaged, and unsymmetrical growth of new wood.
- B. Multiple leader plants: Preserve the leaders which will best promote the symmetry of

the plant. Cut branches close to flush with the trunk or main branch at a point beyond a lateral shoot or bud a distance of not less than 1/2 the diameter of the supporting branch.

Make cut perpendicular to branch.

C. Prune evergreens only to remove broken or damaged branches.

## 3.10 MAINTENANCE

- A. Maintain plantings for a period of at least 60 days after completion of planting operation or until all plants are sufficiently recovered from transplanting and in a healthy growing condition. Maintain planting installed in the fall after September 15 until May 30 of the following year.
- B. Maintenance shall include pruning, cultivating, weeding, watering, and application of appropriate insecticides and fungicides necessary to maintain plants free of insects and disease.
  - 1. Re-set settled plants to proper grade and position. Restore planting saucer and adjacent material and remove dead material.
  - 2. Correct defective work as soon as possible after deficiencies become apparent, and weather permits.
  - 3. Water trees, plants, and ground cover beds within the first 24 hours of initial planting, and not less than twice a week until acceptance.
- C. Maintenance Schedule: Contractor shall submit a maintenance schedule to Owner for approval before any payments are made. The schedule shall include periodic inspections with Owner. Work not completed within five (5) days after notification or within ten (10) days of Maintenance. Maintenance shall include, but not be limited to: all necessary and proper replacements of unacceptable material, straightening plants, fertilizing, pruning and any other operations necessary for proper plant growth and to keep the landscaped areas in a neat, clean, safe condition. The itemized Maintenance Schedule shall include such work as: weeds not allowed to attain more than six (6) inches of growth; replacing, repairing, and tightening stakes, wrapping materials as many times as necessary; promptly removing dead, badly injured or unhealthy plant material and replacing during next planting season. Reconstruction of settled planting areas to their proper grade; removing tree wrapping to inspect trunks and repairing damage and removing insects before rewrapping with new tree wrap; adding mulch as required, etc.

# 3.11 REPLACEMENTS

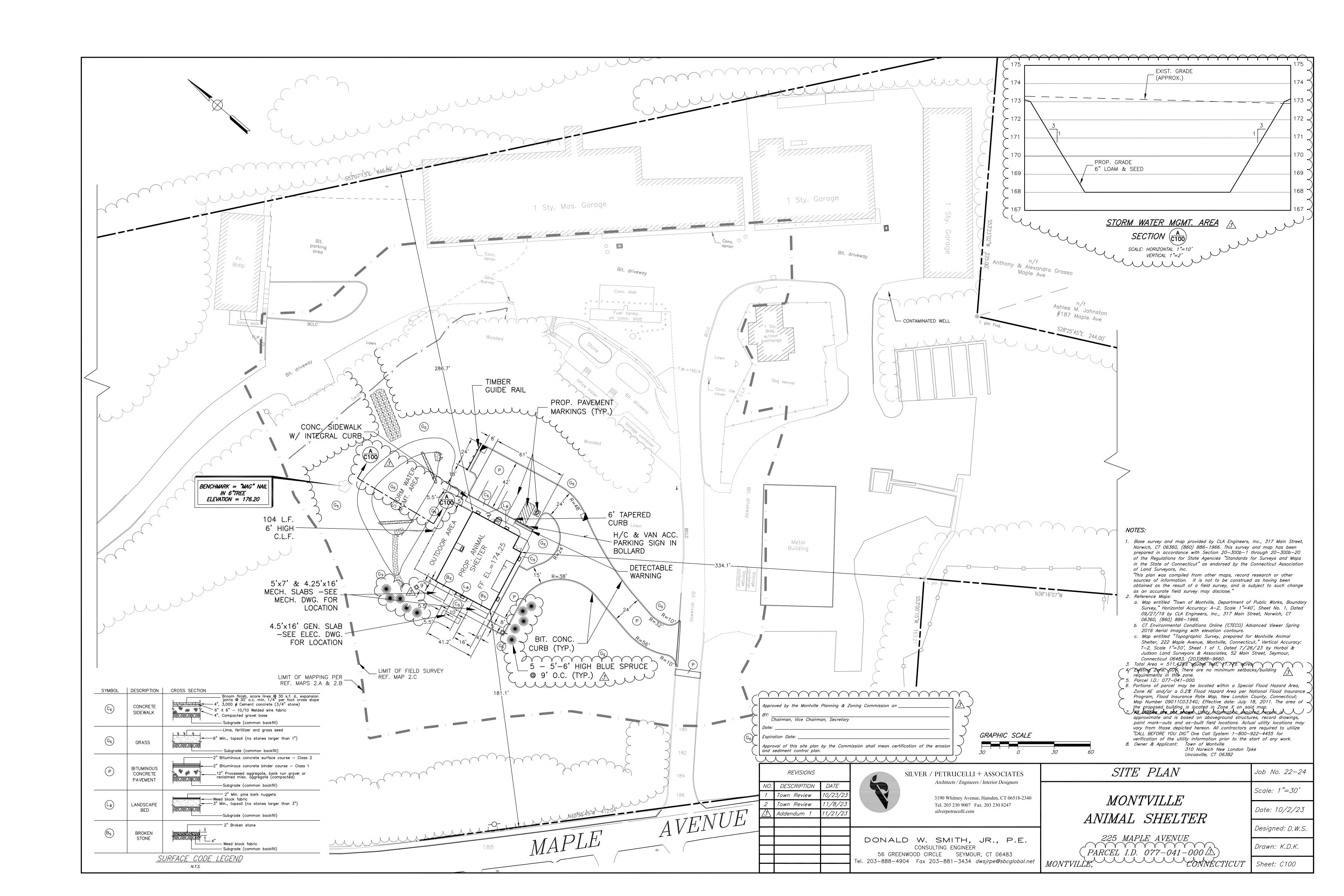
- A. Plants shall be free of dead or dying branches and branch tips and shall bear foliage of a normal density, size, and color. Promptly remove dead, unsightly, unhealthy, or excessively pruned plants as directed. These and any plants missing, due to the Contractor's negligence, shall be replaced or added with the same kind and size as originally specified as soon as conditions permit.
- B. Material and method of replacement shall be the same as specified for the original planting with replacements matching adjacent specimens of the same species. Replacing shall be made as many times as necessary to insure healthy plants and they shall be maintained and guaranteed for twelve (12) months from time of replacement. Necessary repairs due to replacements shall estimated cost of

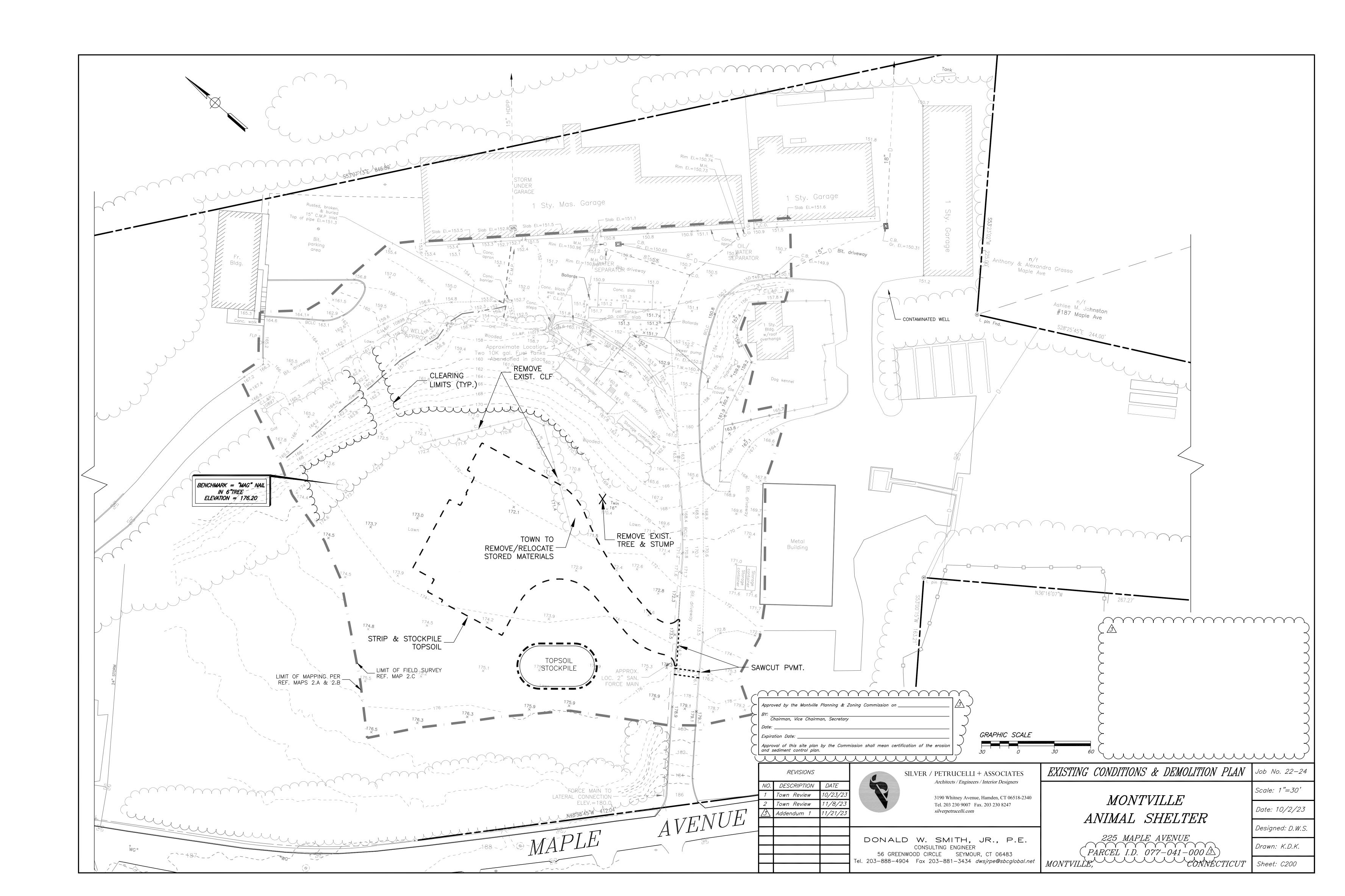
possible replacements may be retained until the end of the Warranty Period and paid after all work is satisfactorily maintained and approved in writing by the Owner.

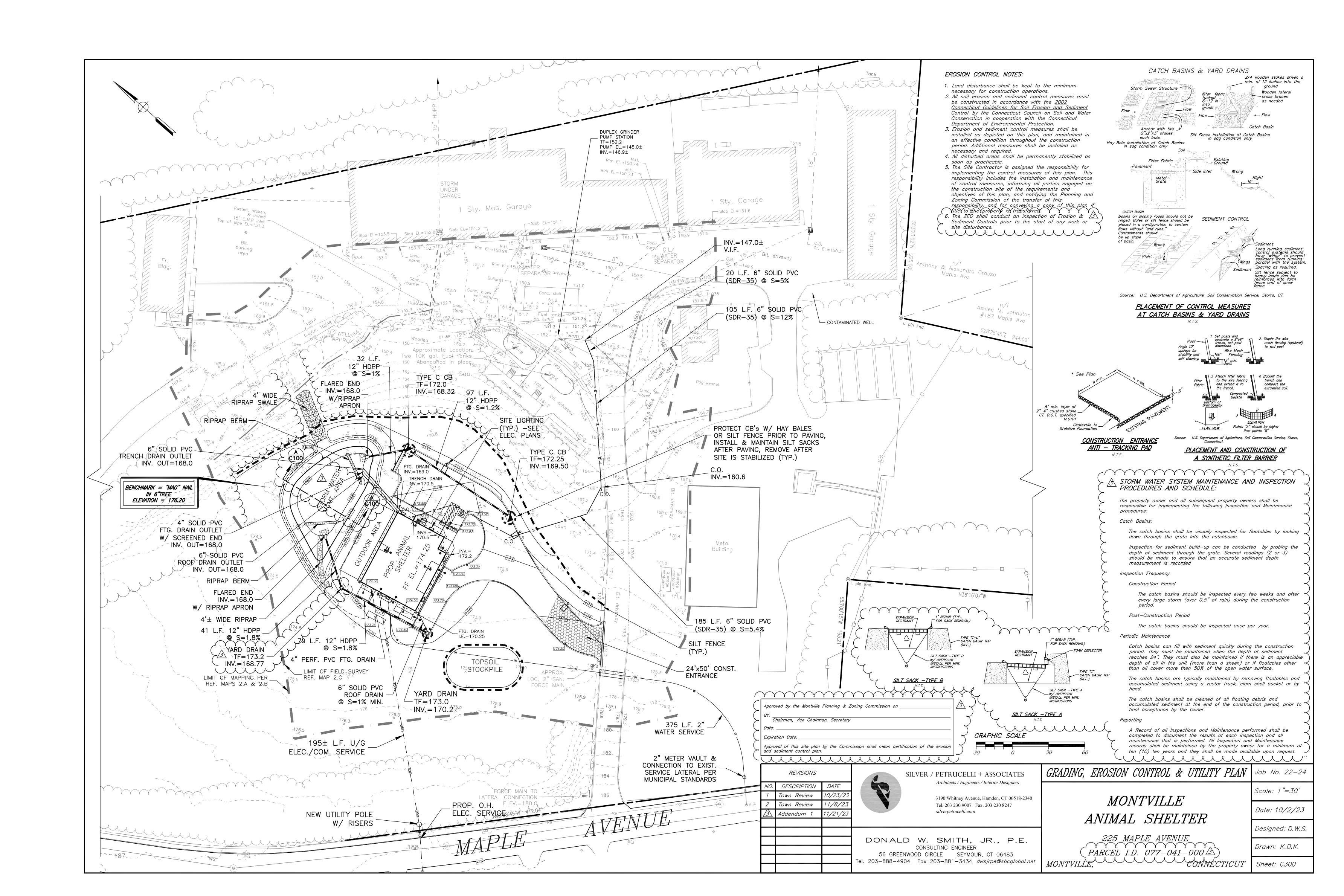
# 3.12 INSPECTION AND ACCEPTANCE

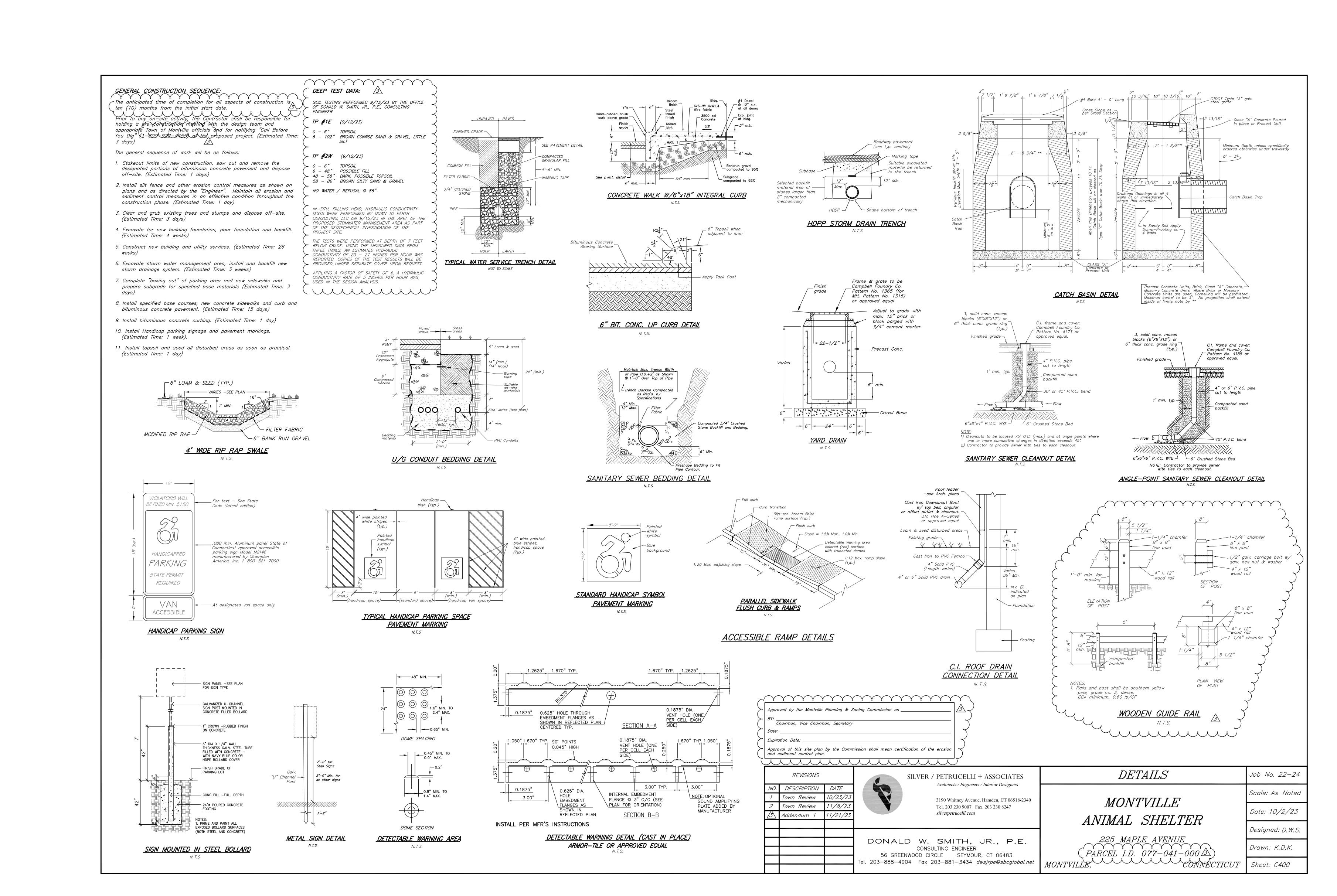
A. All work in this contract shall be found in a neat, clean and safe condition and only those plants that have been properly maintained and are alive and in satisfactory health will accepted.

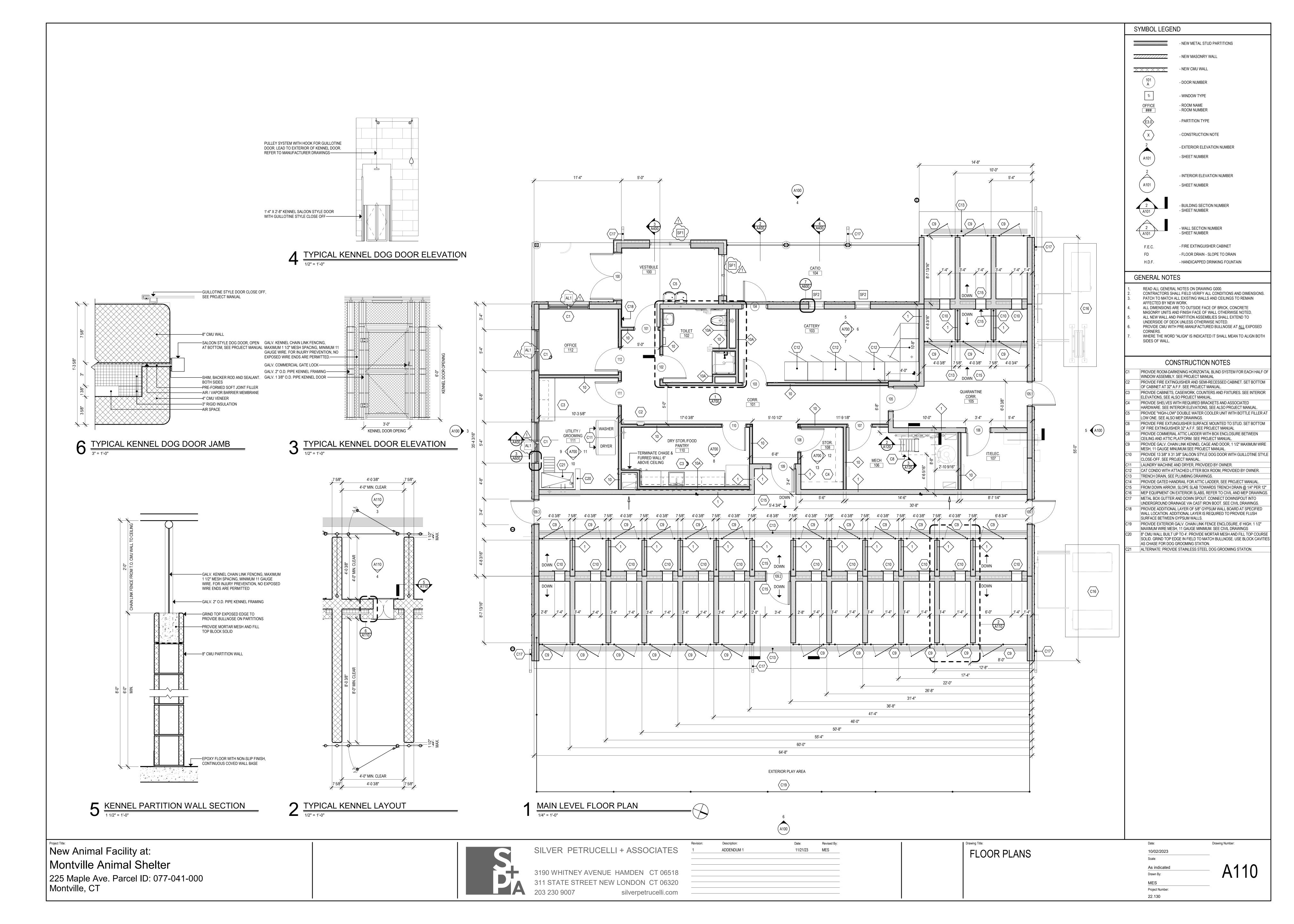
END OF SECTION 329300

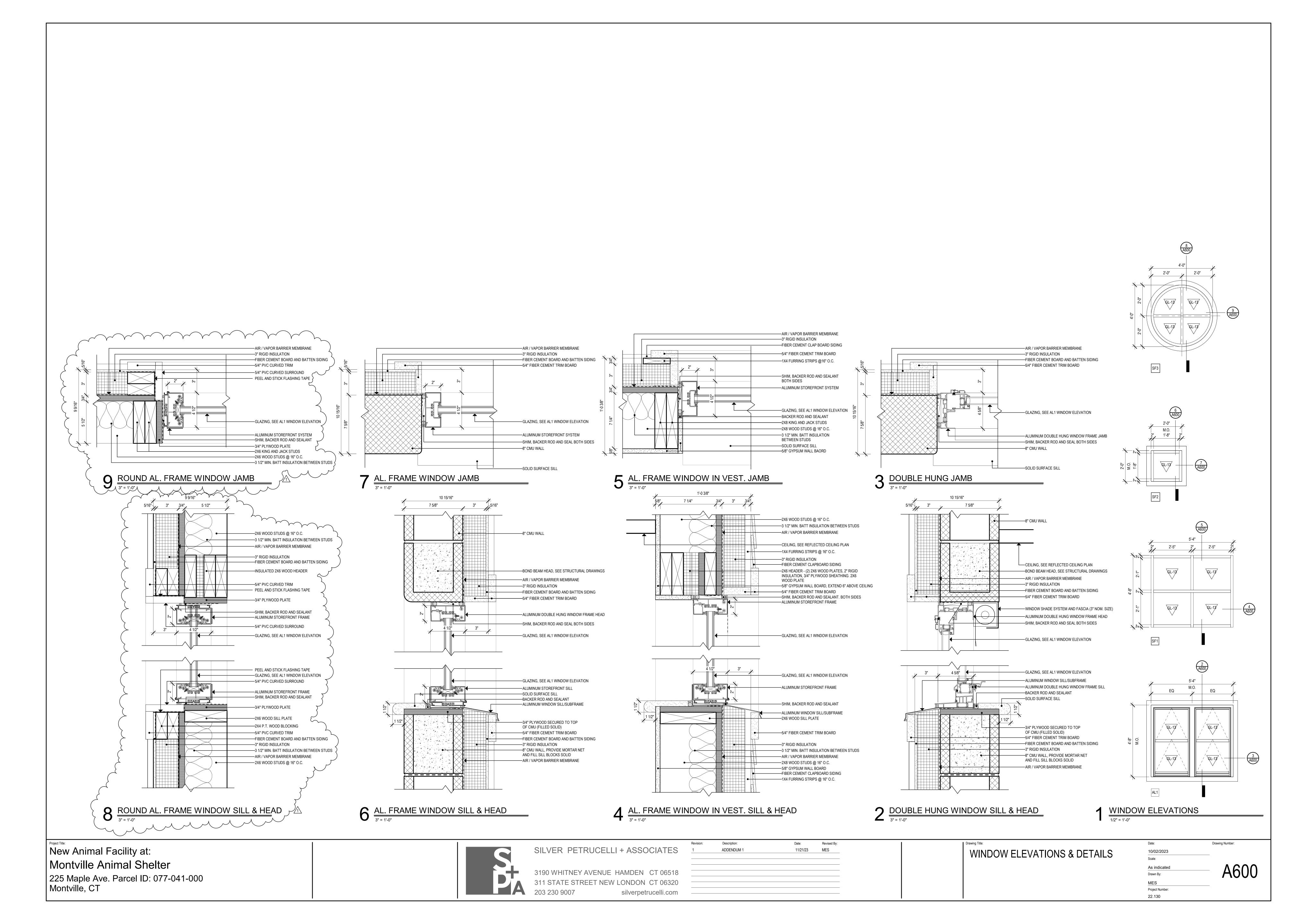


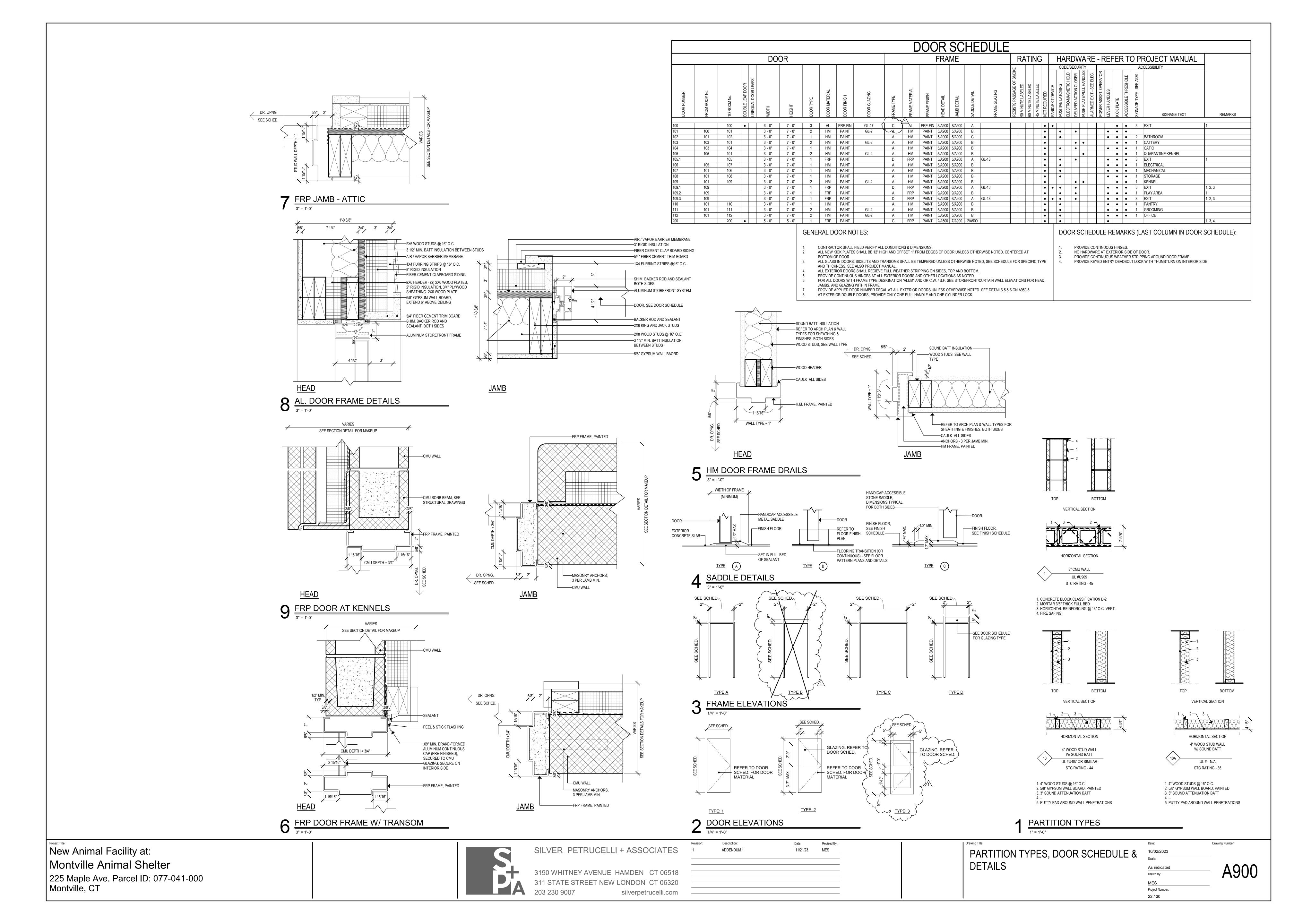












# **Branch Panel: PP** Volts: 120/208 Wye Location: MECH 106 A.I.C. Rating: 42,000 Supply From: Mains Type: MLO Mains Rating: 400 A Mounting: Surface Wires: 4 MCB Rating: 0 A Enclosure: Type 1 1. UPDATE WIRE SIZE AS REQUIRED TO MAINTAIN 3% MAXIMUM VOLTAGE DROP. 2. PANELBOARD SHALL BE CUTTLE HAMMER PPOWER-R-LINE OR EQUAL WITH MAIN LUGS. T Circuit Description Wire & Conduit Trip Poles A B C Poles Trip Wire & Conduit EF-1, EF-2 & EF-5 3/4"C, 2#12, 1#12G 20 A 1 300 500 1 20 A 3/4"C, 2#12, 1#12G Electric Water Cooler 3/4"C, 2#12, 1#12G 20 A 1 300 350 1 20 A 3/4"C, 2#12, 1#12G Lighting 3/4"C, 2#12, 1#12G 20 A 1 860 1260 1 20 A 3/4"C, 2#12, 1#12G Lighting 3/4"C, 2#12, 1#12G 20 A 1 860 1260 1 20 A 3/4"C, 2#12, 1#12G Lighting 3/4"C, 2#12, 1#12G 20 A 1 860 1260 1 20 A 3/4"C, 2#12, 1#12G Power Receptacles 3/4"C, 2#12, 1#12G 20 A 1 860 1080 1 20 A 3/4"C, 2#12, 1#12G Power Receptacles 3/4"C, 2#12, 1#12G 20 A 1 500 1500 1 20 A 3/4"C, 2#12, 1#12G 1 В CKT Circuit Description Wire & Conduit Trip Poles A **Circuit Description** Power Receptacles Refrigerator Washer Machine ASHP-2 Gen, Battery Charger √\$pare√√ Site Lighting Spare Spare 20 A 1 0 0 1 20 A 20 A 1 0 0 0 1 20 A **Total Load:** 46326 VA 49437 VA 47186 VA **Total Amps**: 386 A 413 A **Load Classification Estimated Demand** Panel Totals Connected Load Demand Factor 2442 VA 125.00% 3053 VA 104.57% 8575 VA Total Conn. Load: 142449 VA 8200 VA 127012 VA 100.00% 127012 VA Total Est. Demand: 143517 VA Total Conn. Current: 395 A 350 VA 125.00% 438 VA Lighting - Exterior **Total Est. Demand Current:** 398 A

EQUIPMENT SCHEDULE										
SYMBOL	VOLTAGE	PHASE	FLA	DISCONNECT SWITCH	BREAKER	PANEL	CONDUIT & WIRE	CONNECTION	LOCATION	NOTES
ASHP-1	208	3	20	60A-3P	40A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	EXTERIOR	-
ASHP-2	208	3	15	30A-3P	25A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	EXTERIOR	-
ASHP-3	208	3	15	30A-3P	25A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	EXTERIOR	-
AHU-1	208	3	61	100A-3P	80A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
AHU-2	208	3	15	30A-3P	25A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
AHU-3	208	3	36	60A-3P	45A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
FCU 1-1 THRU 1-4	208	1	2	30A-2P	20A-2P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC SWITCH	SEE DRAWING E200	-
EF-1	120	1	2	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	SEE DRAWING E200	-
EF-2	120	1	4.4	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
EF-3	120	1	4.4	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
EF-4	120	1	4.4	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
EF-5	120	1	1	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	SEE DRAWING E210	-
EF-6	120	1	6	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
ERV-1	120	1	14	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
ERV-2	120	1	15	30A-1P	25A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
ERV-3	120	1	15	30A-1P	25A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
ERV-4	120	1	8	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
EUH-1	208	3	21	30A-3P	30A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
EWH-1 THRU 4	120	1	12.5	30A-1P	20A-1P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	SEE DRAWING E210	-
VFR-1	208	1	28	60A-3P	40A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	ATTIC	-
HWH-1	208	3	50	60-3P	70A-3P	PP	SEE PNL. SCHEDULE	HARD-WIRED DISC. SWITCH	MECHANICAL ROOM 106	-

NOTES:

1. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR QUANITITY.

2. PROVIDE ANY 120V WIRING REQUIRED TO INTERLOCK EQUIPMENT WITH HVAC CONTROL.

3. UPGRADE WIRE SIZE AS REQUIRED TO MAINTAIN 3% MAXIMUM VOLTAGE DROP.

4. CONNECT EXHAUST FAN IN TOILET, GROOMING AND MECHANICAL ROOM WITH LOCAL LIGHT SWITCH.

3. PROVIDE HACR BREAKER TO SUIT HEATING, AIR CONDITION AND REFRIGERATOR EQUIPMENT.

5.PROVIDE 3/4"C, 2#12, 1#12G FOR ALL 20A-1P CKT. WIHOUT WIRE AND CONDUIT INFORMATION.

4. PROVIDE CIRCUIT BREAKER LOCK TO SUIT CIRCUIT SERVING EMERGENCY INVERTER CABINET AND RELAY.

LIGHTING FIXTURE SCHEDULE									
DESIGNATION	DESCRIPTION MANUFACTURER/ MODEL NUMBER	MANUFACTURER/	I	LAMP		E	ELECTRICAL		
			TYPE	COLOR TEMP	NO	DRIVER	VOLTAGE	WATTS	NOTES
А	2' X 2' RECESSED LED EDGE LIT FLAT PANEL WITH ACRYLIC BLEND FROSTER LENS AND SWITCHABLE LUMEN TECHNOLOGY	COLUMBIA CF22-40/33/2835	LED	4000K		ELECTRONIC	120	40	
A/EM	SAME AS TYPE - A INTERCONNECTED WITH EMERGENCY INVERTER CABINET VIA RELAY	COLUMBIA CF22-40/33/2835	LED	4000K		ELECTRONIC	120	40	
B2	2' LENGTH SURFACE MOUNTED LED GASKETED LINEAR RATED FOR EXTREME ENVIROTMENT AND WITH RIBBED FROSTED ACRYLIC LENS	COLUMBIA LXEM2-40LW-RFA-ED-U	LED	4000K		DIMMING	120	26	
В4	4' LENGTH SURFACE MOUNTED LED GASKETED LINEAR RATED FOR EXTREME ENVIROTMENT AND WITH RIBBED FROSTED ACRYLIC LENS	COLUMBIA LXEM4-40ML-RFA-ED-U	LED	4000K		DIMMING	120	42	
B4/EM	SAME AS TYPE - B4 INTERCONNECTED WITH EMERGENCY INVERTER CABINET VIA RELAY	COLUMBIA LXEM4-40ML-RFA-ED-U	LED	4000K		DIMMING	120	42	
B8	8' LENGTH SURFACE MOUNTED LED GASKETED LINEAR RATED FOR EXTREME ENVIROTMENT AND WITH RIBBED FROSTED ACRYLIC LENS	COLUMBIA LXEM8-40ML-RFA-ED-U	LED	4000K		DIMMING	120	84	
С	6" DIAMETER RECESSED LED DOWNLIGHT	PRESCOLITE LFR-6RD-M-20L40K8-WD	LED	4000K		ELECTRONIC	120	14.6	
C1	6" DIAMETER RECESSED LED SHOWER DOWNLIGHT WITH LENS	PRESCOLITE LTR-6RD (SH)-H-SL15L	LED	4000K		DIMMING	120	18.7	
C2	6" DIAMETER ADJUSTABLE RECESSED LED DOWNLIGHT	PRESCOLITE LTR-6RD-H-SL15L / LTR-6RD-T-SL40K8	LED	4000K		DIMMING	120	18.7	
Х	EDGE-LIT LED EXIT SIGN	DUAL LITE LE-S-R-X-W-AC-I	LED	-	-	-	120	2.2	1
X1	EDGE-LIT LED EXIT SIGN WITH ARROW	DUAL LITE LE-S-R-L-W-AC-I	LED	-	-	-	120	2.2	1
X2	EXIT LED SIGN WITH POLYCARBONTE HOUSING AND RATED FOR WET LOCATION	DUAL LITE EVE4X-R-W-A	LED	-	-	-	120	1.42	1
X/HC	ADA EDGE-LIT SIGN WTH DYNAMIC HANDICAP SYMBOL AND UNIVERSAL MOUNTING KIT	SIGNTEX INC CAEBB-1RCW-NA-TW	LED	-	-	-	120	1.42	17

# LIGHT FIXTURE NOTES:

- 1.) PROVIDE WITH FEATURES & ACCESSORIES NECESSARY FOR UNIVERSAL MOUNTING AND DIRECTIONAL ARROW KNOCKOUTS. ARROWS ON PLANS INDICATE DIRECTION OF CHEVRONS, SHADING INDICATES QUANTITY AND LOCATIONOF FIXTURE FACE.
- 2. ALL EXTERIOR FIXTURES AND INTERIOR FIXTURES IN UNHEATED SPACES SHALL BE CAPABLE OF OPERATING IN COLD TEMPERATURES (ZERO DEGREE FARENHEIGHT).
- 3. ALL ELECTRONIC DRIVERS SHALL HAVE A MAXIMUM TOTAL HARMONIC DISTORTION BETWEEN TEN & FIFTEEN PERCENT (10-15%).
- 4. ALL INTERIOR FIXTURES SHALL BE FURNISHED WITH 4000K COLOR LED's, AND ALL EXTERIOR LED's SHALL BE 4000k.
- 5. FURNISH ALL ADDITIONAL MATERIALS AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION AND BE FULLY OPERATIONAL.
- 6. FURNISH WITH NICKEL CADMIUM BATTERY FOR A MINIMUM OF 90 MINUTES OF EMERGENCY LIGHTING OPERATION.
- 7. FIXTURE SHALL BE ONE LONG SIGN WITH THE WORDING "EXIT" AND THE CT APPROVED DYNAMIC HANDICAP SYMBOL ADJACENT TO IT.
- ALL EQUALS MUST BE APPROVED BY THE ARCHITECT/ENGINEER OF RECORD BY A <u>POINT BY POINT CALCULATION</u>. IES FILES HAVE TO BE PROVIDED FOR EACH ALTERNATE <u>FIXTURE, THERE WILL BE NO EXCEPTIONS GRANTED</u>. ANY ALTERNATES SUBMITTED MUST NOT CONSUME MORE THEN THE WATTAGE SHOWN ON THE FIXTURE SCHEDULE, THERE WILL BE NO EXCEPTIONS GRANTED. ALTERNATE FIXTURES MAY VARY SLIGHTLY IN APPEARANCE & AESTHETICS PROVIDED THEY MEET THE PERFORMANCE REQUIREMENTS SHOWN ON FIXTURE SCHEDULE (FINAL APPROVAL BY LIGHTING DESIGNER AND ARCHITECT). POINT BY POINT CALCULATIONS NEED TO BE PERFORMED AND APPROVED PRIOR TO PRODUCT SUBMITTAL PACKAGE SUBMISSION.

ALL SUBSTITUTED DRIVERS OFFERED MUST BE LESS THAN OR EQUAL TO WATTAGES SHOWN ON EACH TYPE FIXTURE, NO SUBSTITUTED DRIVER WILL BE ACCEPTED THAT DOESN'T MEET THIS REQUIREMENT.

- 9. CONTRACTOR TO INCLUDE IN THEIR BASE BID THE FOLLOWING EXTRA MATERIAL:
  - 2 PIECES POWER PACKS DUAL CIRCUIT 2 PIECES - WALL SWITCH WITH J-BOX (TOGGLE & DIMMER)
  - 2 PIECES WALL SWITCH WITH J-BOX (TOGGLE & DIMM 2 PIECES - JUNCTION BOXES INSTALLED (EACH SIZE) 2 PIECES - ROOM CONTROLLER

1 PIECE - EXIT SIGN

New Animal Facility at:

Montville Animal Shelter

225 Maple Ave.

Montville, CT



SILVER PETRUCELLI + ASSOCIATES

3190 WHITNEY AVENUE HAMDEN CT 06518 311 STATE STREET NEW LONDON CT 06320 203 230 9007 silverpetrucelli.com

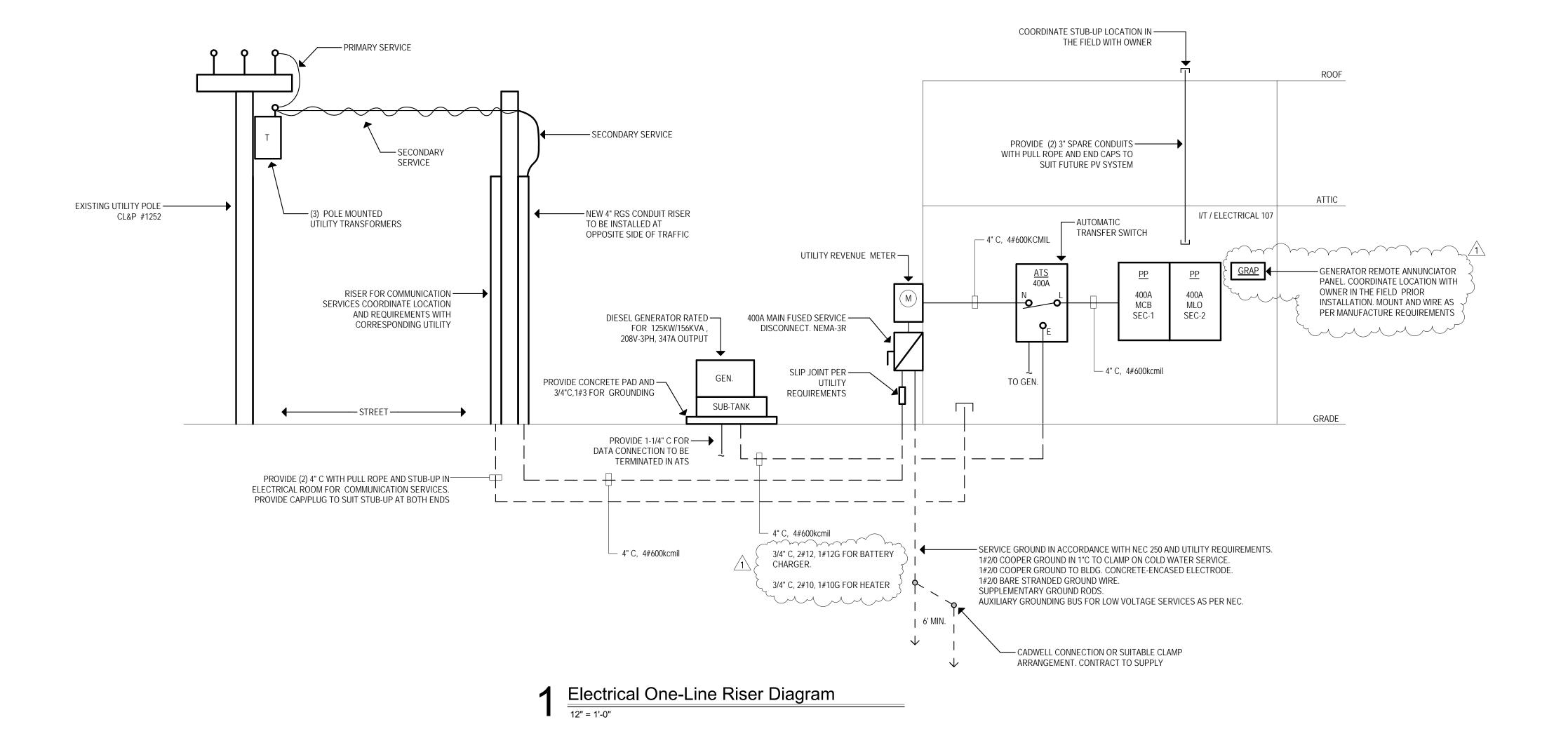
Revision:	Description:	Date:	Revised By:
1 /	Addendum #1	11/21/2023	

ELECTRICAL SCHEDULES

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# CONDUCTOR NOTES:

- 1. ALL VALUES BASED ON COPPER CONDUCTORS.
- 2. <u>FEEDERS</u> UPGRADE WIRE TO MAINTAIN MAXIMUM OF 2% VOLTAGE DROP.

# BRANCH CIRCUITS UPGRADE WIRE TO MAINTAIN MAXIMUM OF 3% VOLTAGE DROP.

- 3. NUMBER OF WIRES SHALL BE DETERMINED WITH EQUIPMENT ELECTRICAL NAMEPLATE CHARACTERISTICS.
- 4. WHERE NEUTRALS ARE REQUIRED, IT SHALL MATCH FEEDER CONDUCTOR SIZE.
- 5. USE CONDUCTOR (THWN/THHN) (3PH, 3W) WITH GROUND PRIMARY FEEDER FOR TRANSFORMERS.

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1	Addendum #1	11/21/2023	

ELECTRICAL RISER DIAGRAM

Date: Drawing Number:

09/29/2023
Scale:

AS NOTED
Drawn By:

JRP
Project Number:

22.130